

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph at page 17, line 20, as follows:

In a preferred embodiment, the MgO is incorporated via a magnesium layer silicate made by the Rockwood company (~~Laponite LAPONITE silicate~~ product group). Theoretical calculations according to Lakatos show that the viscosity of a standard water glass (28% SiO₂, 8.3% Na₂O) rises by about 5% through the addition of 5.3% ~~Laponite LAPONITE RD silicate~~ in the temperature range from 700°C to 1000°C [1292°F to 1832°F].

Please amend the paragraph at page 20, line 21, as follows:

Subsequently, 7.32 grams of ~~Laponite LAPONITE RDS silicate~~ are added in small quantities while being stirred (1250 rpm) at STP.

Please amend the paragraph at page 21, line 23, as follows:

Subsequently, various weights of ~~Laponite LAPONITE RDS silicate~~ are added in small quantities at STP while being stirred (1250 rpm).

Please amend the table at the top of page 22, as follows:

No.	Demineralized water in grams	Laponite LAPONITE RDS silicate in grams
01	32.51	0.74
02	32.80	2.36
03	32.65	3.99

Please amend the paragraph at page 25, line 8, as follows:

Subsequently, various weights of ~~Laponite LAPONITE RDS silicate~~ are added in small quantities at STP while being stirred (1250 rpm).

Please amend the table at page 22, line 13 as follows:

No.	Demineralized water in grams	<u>Laponite LAPONITE RDS silicate</u> in grams
01	117.59	1.18
02	113.76	2.32
03	112.41	3.50

Please amend the paragraph at page 42, line 7, as follows:

The introduction of surfactants (anionic, cationic, amphoteric and non-ionic) brings about, among other things, a change in the surface tension of the interacting constituents. This has positive effects, for example, on the wettability of the substrate, on the degassing of the sols and on the drying time. These expected influences on the system were observed with representatives of all four surfactant classes. Examples of anionic surfactants are Sulfetal LS (C) and Sulfetal 4105 (C), for cationic surfactants QMS 435 (A), of amphoteric surfactants Amphotensid D1 (C), Amphotensid EH (C) and ~~Tegotens~~ TEGOTENS DO surfactant (B) and of non-ionic surfactants DBE 814 (A), DBE 821 (A), DBE 712 (A), DBE 621 (A), DBE 732 (A), DBP 534 (A), CMS 626 (A), ~~Tegotens~~ TEGOTENS G826 surfactant (B), Tegopren 5847 (B), Zusolat 1008/85 (C), Propetal 340 (C), Propetal 99 (C) and Oxytal 500/85 (C).

Please amend the paragraph at page 43, line 5, as follows:

25.74 grams of Crystal 0075 (sodium-water glass, 8.32% Na₂O, 28.11% SiO₂, solids content 36.43%, molar modulus 3.48, pH 11.18) are placed into a reaction vessel.

Subsequently, 0.13 grams of ~~Tegotens~~ TEGOTENS G826 surfactant are dripped in. ~~Tegotens~~ TEGOTENS G826 surfactant (2-ethylhexyl glucoside) is a non-ionic surfactant. A clear solution is immediately formed after the addition of ~~Tegotens~~ TEGOTENS G826 surfactant. An emulsion is formed after 70 hours of stirring (600 rpm) at room temperature. The emulsion is applied onto a plastic film (0.1 grams of solids content per cm²). The drying is carried out in an air atmosphere at 80°C [176°F] until a residual moisture content of 25% is reached.

Please amend the paragraph at page 43, line 16, as follows:

The same experiment is carried out with a higher concentration of Tegotens TEGOTENS G826 surfactant; the results are compiled in Table 5.

Please amend the paragraph at page 43, line 19, as follows:

1.29 grams of glycerin are weighed into a reaction vessel. 0.14 grams of Tegotens TEGOTENS G826 surfactant are dripped in while being stirred. Tegotens TEGOTENS G826 surfactant (2-ethylhexyl glucoside) is a non-ionic surfactant. The mixture is stirred for 1 hour at room temperature. 25.50 grams of Crystal 0075 (sodium-water glass, 8.32% Na₂O, 28.11% SiO₂, solids content 36.43%, molar modulus 3.48, pH 11.18) are added while being stirred, thus forming an emulsion. After being stirred (600 rpm) for 70 hours at room temperature, a clear solution was formed. The solution is applied (weight per unit area: 0.1 g/cm²) onto a plastic film. The drying is carried out in an air atmosphere at a temperature of 80°C [176°F] until a residual moisture content of 25% is reached. The film thus obtained is clear; it has almost no cracks and few bubbles.

Please amend the first paragraph and following table and legend on page 44, as follows:

The same experiment is conducted with a higher concentration of Tegotens TEGOTENS G826 surfactant; the results are shown in Table 5.

Tegotens TEGOTENS G826 surfactant in Na-water glass (Crystal 0075)			
% <u>Tegotens TEGOTENS surfactant</u> in the solution	% <u>Tegotens TEGOTENS surfactant</u> in the film	Residual moisture in the film	Visual evaluation
0.52	1.05	25.32%	No cracks and bubbles
1.04	2.10	25.41%	No cracks and bubbles

Tegotens <u>TEGOTENS</u> G826 <u>surfactant</u> in Na-water glass (Crystal 0075) + 5% glycerin			
% Tegotens <u>TEGOTENS</u> <u>surfactant</u> in the solution	% Tegotens <u>TEGOTENS</u> <u>surfactant</u> in the film	Residual moisture in the film	Visual evaluation
0.53	0.99	25.13%	few bubbles
1.05	1.96	25.66%	few bubbles

Table 5: Results of the introduction of Tegotens TEGOTENS G826 surfactant